

IN THE SPECIFICATION

Please amend the paragraphs of the specification as follows:

Please replace the paragraphs identified below with the following amended paragraphs:

Page 2, line 15, the Paragraph beginning with the words "In modern mobile telephone...."

In modern mobile telephone communication systems, several data streams (e.g., fax transmissions, internet transmissions, voice calls etc.) can be transmitted to a mobile station concurrently. In systems such as CDMA systems, the transmission of such data streams can occur on the same forward link traffic channel (i.e., frequency channel). In such cases, each data stream (e.g., voice, fax, internet, etc.) transmitted from [[a]] a particular base station to the mobile station on a given forward link is modulated using a different spreading code often called a Walsh code that permits each data stream to be separately demodulated at the mobile station. Different base stations can transmit on the forward link with the same spreading code when they utilize a different scrambling code (often called a PN code).

Page 3, line 31, the Paragraph beginning with the words " In accordance with a still further..."

In accordance with a still further embodiment, the present invention uses a single interleaved power control signal to transmit multiple power control command streams to each base station in both the first and second active sets, wherein each of the power control command streams is used to control the transmit power of a different data stream sent from each base station to the mobile station. In this embodiment, first and second data streams are transmitted from each base station in the first and second active sets and received at the mobile station. A stream of power control commands is formed at the mobile station in accordance with the first received data stream from each base station in the first active set, and a stream of power control commands is formed at the mobile station in accordance with the second received data stream from each base station in the second active set. A power control signal is next formed at the

mobile station by interleaving the streams of power control commands, and the interleaved power control signal is transmitted from the mobile station to each base station in the first and second active sets. First and second received streams of power control commands are formed at a given base station in the first and second active sets by deinterleaving the received power control signal at the given base station. The transmit power level of the first data stream is then controlled from the given base station in accordance with the first received stream of power control commands, and the transmit power level of the second data stream is controlled from the given base station in accordance with the second received stream of power control commands.

Page 6, line 32, the Paragraph beginning with the words "In accordance with a still further...."

In accordance with a still further embodiment where the communication system includes first and second active sets, the first data stream is transmitted from the base stations in the first active set to the mobile station, and the second data stream is transmitted from the base stations in the second active set to the mobile station. In this embodiment, the second active set is a subset of the first active set. A first stream of power control commands is formed at the mobile station in accordance with the first data stream received at the mobile station from the base stations in the first active set. A second stream of power control commands is formed at the mobile station in accordance with the first data stream or second data stream or both data streams received at the mobile station from the base stations in the second active set. The mobile station then forms an interleaved power control signal by interleaving the first and second streams of power control commands, and the interleaved power control signal is transmitted from the mobile station to all the base stations in both active sets. The interleaved power control signal is received at base stations in both the first and second active sets. The base stations form a first received stream of power control commands by de-interleaving the received interleaved power control signal, and a second received stream of power control commands by de-interleaving the received interleaved power control signal. The transmit power level of the first and second data streams transmitted by the base stations that are in the second active set is controlled by using the commands of the first stream or a combination of both streams of power control commands. The

transmit power level of the first data stream transmitted by the base stations that are in the first active set but not in the second active set is controlled in accordance with the first received stream of power control commands or a combination of the first and second received streams of power control commands.

Page 22, line 32 the paragraph beginning with “Figure 1F...”

Figure 1F shows a mobile radio station 100f that forms an interleaved power control bit stream in accordance with a further alternate embodiment of the present invention. In this embodiment, a first set of active base stations (BS1, BS2) simultaneously transmit versions of the first data stream (e.g., signals 120, 122) to the mobile station 100f, and a second set of active base stations (BS1) transmit the second data stream (signal 120a) to the mobile station 100f. [[.]] In this embodiment, the transmit power level of the first data stream 122 from the second base station (BS2) is controlled at the mobile station 100f by monitoring the signal quality of the first data stream 120 received from the first base station as well as the signal quality of the first data stream 122 received from the second base station. However, in contrast to the embodiment of Figure 1E, in this embodiment the transmit power levels of the first and second data streams (120, 120a) from the first base station are controlled at the mobile station by monitoring the signal quality of only the second data stream 120a received from the first base station.

Page 24, line 27, the paragraph beginning with “Referring still...”

Referring still to Figure 1G, power control command generator 180 forms a single (common) output power control command stream 180a by simultaneously monitoring the signal quality of traffic signals 121 and 123 which respectively represent the first data stream transmitted from each base station in the second active set and the second data stream transmitted from each base station in the second active set. In one embodiment, the algorithm used by power control command generator 180 for generating the stream of power control commands 180a is as follows. Power control command generator 180 calculates a total value representing the sum of the signal to noise ratios (SNRs) for the first data stream received from each base station in the second active set (i.e., streams 121). This sum is compared to a first threshold that represents a

desired total SNR value that mobile station 100g expects to receive from all base stations in the second active set for the first data stream. Power control command generator 180 also calculates a total value representing the sum of the SNRs for the second data stream received from each base station in the second active set (i.e., streams 123). This sum is compared to a second threshold that represents a desired total SNR value that mobile station 100g expects to receive from all base stations in the second active set for the second data stream. If, in either of the above comparisons the threshold has not been exceeded, power control command generator 180 generates a power-up command that is then sent using stream 180a; alternatively, if in either of the above comparisons the threshold has been exceeded, power control command generator 180 generates a power-down command that is then sent using stream 180a.

Page 34, line 12, the paragraph beginning with the words “Fig. 2E....”

Fig. 2E shows a base station 200e that receives a plurality of power control signals formed from a plurality of mobile stations 100f of the form shown in Figure 1F, and uses the power control signals to control the transmit power levels of first and second data streams transmitted to the mobile stations 100f. In the embodiment of Figure 2E, base station 200e is in [[the]] both active sets of the two mobile stations 100f shown as being serviced by the base station. Power control signals received from the mobile stations (MS1, ... MSx) are provided to power control signal demodulation units 210, 214. Demodulation unit 210 demodulates an interleaved power control signal transmitted to base station 200e from a first mobile station (MS1), demodulation unit 214 demodulates an interleaved power control signal 110 transmitted to base station 200e from a second mobile station (MSx).